

consequence of the operation had, after moulting, begun to produce feathers characteristic of the normal male. Those birds have been kept to the present time, and now show a complete change to the cock-feathered type, except that the comb is reduced in size as in the ordinary capon. The spurs, however, appear to have their full growth. Since the  $F_1$  birds were certainly heterozygous, and the few  $F_2$  birds operated upon might have been heterozygous for cock feathering, it became desirable to carry out the operation on the pure Seabright cockerels which are always hen-feathered. The change in them, as the birds before you show, is as marked and as complete as in the  $F_1$  and  $F_2$  birds.

One bird after completely changing to cock-feathering (with reduced comb also) began after six months to change back; and, as is demonstrated by the bird, is at present in an intermediate stage. The comb has begun to enlarge again. Presumably a small piece of the testis was left—not large enough at first to prevent the change to cock-feathering—which has regenerated so far, that, at the last moult, the new feathers were affected.

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**The effect of painting the pancreas with adrenalin on glycemia and glycosuria.**

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About fifteen years ago Herter and his coworkers reported that painting the pancreas with adrenalin causes a considerable glycosuria and they even assumed that the pronounced nature of glycosuria following intraperitoneal injections appears to be mainly attributable to the readiness with which the injected adrenalin comes in contact with the pancreas. Vosburgh and Richards reported later that the painting of the pancreas with adrenalin produces considerable hyperglycemia. To our knowledge the validity of these unusual statements was not confirmed or even tested since their publication. We have carried out recently a long series of experiments in which the hyperglycemia

and glycosuria were studied after painting the pancreas. In the main we could not confirm these claims, but we wish however to mention here only one striking result. In eight experiments in which the pancreas was so isolated from the peritoneum that none of the adrenalin could enter the peritoneal cavity, the hyperglycemia as well as the glycosuria produced by the painting was insignificant, surely not more than would have occurred if the adrenalin had been given subcutaneously or painted on some part of the peritoneum.

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**Studies of dental caries, with special reference to internal secretions in their relation to the development and condition of dental enamel.**

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- A. Do substances in the blood pass from dental pulp into dental enamel of living animals? Hattie L. Heft.
- B. Is dental enamel permeable to substances in saliva? Elizabeth C. Franke.
- C. Effects of parathyroidectomy and castration on dentition in albino rats. Edgar G. Miller, Jr.
- D. Dental effects of feeding glandular tissues to albino rats. Edgar G. Miller, Jr.
- E. A new glycoprotein: dentomuroid. Leila Noland.

Decay of teeth, except that arising from trauma, may be due, primarily, to local deficiency in the structure and quality of enamel, or it may result from local specific disintegrative attack on enamel, regardless of normality of the enamel, or it may be caused by both these types of influences. In this series of studies we are endeavoring to ascertain whether "influences from the inside," such as those of a nutritional type and involving internal secretions, may be responsible factors in the incidence of dental caries.